Last Updated: Vankeerbergen,Bernadette Chantal 09/18/2025

Term Information

Effective Term Spring 2026

General Information

Course Bulletin Listing/Subject Area Biology

Fiscal Unit/Academic Org Introductory Biology - D0326

College/Academic Group Arts and Sciences
Level/Career Undergraduate

Course Number/Catalog 1870

Course TitleBiology of SexTranscript AbbreviationBiology of Sex

Course Description A foundational exploration of the evolution and maintenance of sexual reproduction across species,

including sexual selection, mating systems, and reproductive strategies.

Semester Credit Hours/Units Fixed: 2

Offering Information

Length Of Course 14 Week, 12 Week, 8 Week, 7 Week

Flexibly Scheduled Course Never

Does any section of this course have a distance No

education component?

Grading Basis Letter Grade

RepeatableNoCourse ComponentsLectureGrade Roster ComponentLectureCredit Available by ExamNoAdmission Condition CourseNoOff CampusNever

Campus of Offering Columbus, Lima, Mansfield, Marion, Newark, Wooster

Prerequisites and Exclusions

Prerequisites/Corequisites none

Exclusions Not open to students with credit for 3870.

Electronically Enforced Yes

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code 26.0101

 Subsidy Level
 General Studies Course

 Intended Rank
 Freshman, Sophomore

Requirement/Elective Designation

The course is an elective (for this or other units) or is a service course for other units

Course Details

Course goals or learning objectives/outcomes

- 1.1 Define the terms sex and gender.
- 1.2 Describe variation in how different species manifest sex.
- 1.3 Explain the mechanisms of genetic inheritance of chromosomal sex.
- 1.4 Compare mechanisms of sex determination across species.
- 2.1 Describe variation in asexual reproduction across animals, plants and fungi.
- 2.2 Explain the evolutionary advantages and disadvantages of asexual reproduction.
- 2.3 Articulate how selection contributes to the persistence of sexual reproduction in various groups.
- 2.4 Explain how colonial living evolves through division of labor in reproduction.
- 3.1 Explain how sexual selection influences animal mating systems.
- 3.2 Describe different mating systems in plants and how they evolved.
- 3.3 Describe fungal life cycles and mating systems.
- 3.4 Explain how pollinators contribute to the evolution of reproductive strategies in plants.
- 4.1 Discuss how different investment in male and female offspring relates to different sexual strategies.
- 4.2 Describe how parasites influence reproductive behavior and other traits in their hosts.
- 4.3 Examine how evolutionary pressures cause differences in birth strategies across animals.

Content Topic List

- Chromosomal sex
- Genetics
- Asexual reproduction
- Sexual Selection
- Evolution
- Mating Systems
- Ecology

Sought Concurrence

No

Attachments

Biology 1870 Syllabus.pdf: Updated syllabus

(Syllabus. Owner: Andrews, Adam Lee)

• MG Concurrence for Bio 1870.pdf: MolGen Concurrence

(Concurrence. Owner: Andrews, Adam Lee)

• BIOL 1870 concurrence EEOB.pdf: EEOB Concurrence

(Concurrence. Owner: Andrews, Adam Lee)

Comments

• Please see Subcommittee feedback email sent 9/8/25. (by Neff, Jennifer on 09/08/2025 02:03 PM)

Last Updated: Vankeerbergen,Bernadette Chantal 09/18/2025

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Andrews,Adam Lee	05/13/2025 11:16 AM	Submitted for Approval
Approved	Kulesza, Amy Elizabeth	05/14/2025 07:26 AM	Unit Approval
Approved	Vankeerbergen,Bernadet te Chantal	08/11/2025 10:20 AM	College Approval
Revision Requested	Neff,Jennifer	09/08/2025 02:03 PM	ASCCAO Approval
Submitted	Andrews,Adam Lee	09/18/2025 08:59 AM	Submitted for Approval
Approved	Kulesza, Amy Elizabeth	09/18/2025 10:21 AM	Unit Approval
Approved	Vankeerbergen,Bernadet te Chantal	09/18/2025 10:30 AM	College Approval
Pending Approval	Jenkins,Mary Ellen Bigler Neff,Jennifer Vankeerbergen,Bernadet te Chantal Steele,Rachel Lea	09/18/2025 10:30 AM	ASCCAO Approval



Biology 1870 The Biology of Sex

Spring 2026 - 2 Credit Hours

<u>Lecturer</u>: <u>Course Coordinator</u>:

Email:
Office:
Office:
Student Hours:
Phone:

other times scheduled by appointment

Class Meeting Schedule:

Lecture: Twice Weekly for 55 minutes

Prerequisites:

None. Not open to students with credit for 3870.

No Required Course Materials

Credit Hours and Work Expectation:

This is a 2-credit-hour course. According to Ohio State policy, students should expect around 2 hours per week of time spent on direct instruction in addition to 4 hours of homework to receive a grade of C average. <u>ASC Honors</u> provides an excellent guide to scheduling and study expectations.

Course Description:

A foundational exploration of the evolution and maintenance of sexual reproduction across species, including sexual selection, mating systems, and reproductive strategies.

Biology 1870 Course Goals and Expected Learning Outcomes				
Goals	ELOs			
	Successful students will be able to			
Students will define sex and describe the biology and development of sex differences in humans as compared to other species	1.1 Define the terms sex and gender. 1.2 Describe variation in how different species manifest sex. 1.3 Explain the mechanisms of genetic inheritance of chromosomal sex. 1.4 Compare mechanisms of sex determination across species.			
Students will explain the evolution and maintenance of sexual reproduction.	2.1 Describe variation in asexual reproduction across animals, plants and fungi. 2.2 Explain the evolutionary advantages and disadvantages of asexual reproduction. 2.3 Articulate how selection contributes to the persistence of			

	sexual reproduction in various groups.
	2.4 Explain how colonial living evolves through division of labor
	in reproduction.
	3.1 Explain how sexual selection influences animal mating
	systems.
3. Students will explore the evolution of	3.2 Describe different mating systems in plants and how they
mating systems and the ecological	evolved.
factors that drive them.	3.3 Describe fungal life cycles and mating systems.
	3.4 Explain how pollinators contribute to the evolution of
	reproductive strategies in plants.
	4.1 Discuss how different investment in male and female
4. Students will examine how reproductive	offspring relates to different sexual strategies.
strategies influence the evolution of	4.2 Describe how parasites influence reproductive behavior and
organisms' traits and behaviors.	other traits in their hosts.
organisms traits and benaviors.	4.3 Examine how evolutionary pressures cause differences in
	birth strategies across animals.

Grading and Evaluation:

Graded assignments may come in three forms, and students should note the expectations for each in the descriptions of our class assignments below:

- Independent Work (†): Strictly non-collaborative, original-individual work. You may discuss this assignment only with your instructor. Discussions with other individuals, either in person or electronically, are strictly prohibited and constitute academic misconduct.
- Required Collaboration (**): An explicit expectation for collaboration among students either inclass or outside (i.e., group work).
- Optional Collaboration (♣): Students are permitted, but not required, to discuss the assignment or ideas with each other. However, all submitted work must be one's original and individual creation.

Assignment	Points	Assignment Type
Exams (3 x 100 points)	300	†
In-class activities (14 x 20 points)	280	t ette 🛹
SALG	5	Ť
Total Points Possible	585	

Exams (100 points each)

Student understanding of the content will be assessed through three summative in-class exams consisting primarily of multiple-choice questions with a few short answers. The final exam will not be comprehensive beyond the natural interconnectedness of course material.

In-Class Activities (280 points total)

Throughout the lectures, participation will be encouraged and assessed through a range of active learning activities, which may include TopHat questions, case-studies, worksheets, and discussions. Some will be completed individually while others will require engagement with other students in the class.

Student Assessment of Learning Gains (5 points)

This survey will be administered at the end of the course to gather information from students about the gains made throughout the course and how various aspects of the course contributed to those gains. Full credit will be awarded for completion.

Your Final Grade:

Your final grade will be based on the percentage of the 585 points that you earn during the course of the semester as described above. We do not grade the course on a curve. Final letter grades will be determined by the grade scale below:

Grade Scale:

Α	A-	B+	В	B-	C+	С	C-	D+	D	Е
100 –	92.9 –	89.9 –	86.9 –	82.9 –	79.9 –	76.9 –	72.9 –	69.9 –	66.9 –	59.9 –
93.0%	90.0%	87.0%	83.0%	80.0%	77.0%	73.0%	70.0%	67.0%	60.0%	0%

Posting of Grades:

All grades will be posted on Carmen. After grades are posted you have <u>10 working days</u> to challenge any grade or inquire regarding an unposted or missing grade. **After that time, grades are final.** To challenge or inquire about a missing grade, contact your laboratory instructor.

IMPORTANT

Make sure that all of your grades are properly posted on Carmen as you receive them. Challenges about grades, particularly after the end of the semester, will not be entertained after the 10-day grace period.

Late Assignments:

All assignments are due on the date and time prescribed in the course schedule. Late work will not be accepted except in rare (and documentable) circumstances.

Absences:

Exams:

If you are too ill to take an exam or must miss for another legitimate unscheduled reason, you must contact the Course Coordinator within 24 hours of the exam. Make up exams will be given only to students who produce, at the make up or before, documentation of a legitimate reason (at the time of the absence) for missing the exam. Valid excuses are limited to problems that are beyond the student's control, such as military duty, intercollegiate athletic or academic activities, funerals, etc. Medical excuses will be considered only if you have been treated by a medical professional on the day of the exam (excuses from the student health center website will not be accepted). Lack of transportation, loss of electricity, travel plans, etc. are not considered valid excuses. If you anticipate having to miss an exam due to attendance at a university sanctioned event or other qualifying conflict, you must contact the Course Coordinator at least one week in advance of the exam.

If you have no documentation to support your absence, or your absence from the exam is not for an excused reason, you will still be offered the opportunity for a makeup exam, with a 25% overall deduction on your exam score if arrangements are made within 24 hours of the original exam. The format of makeup exams is at the discretion of the instructors.

Note: Check the date and time of the final examination now and make sure that this time does not conflict with your future plans. No early final exams will be given.

Disability Services:

The university strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If students anticipate or experience academic barriers based on a disability (including mental health and medical conditions, whether chronic or temporary), they should let their instructor know immediately so that they can privately discuss options. Students do not need to disclose specific information about a disability to faculty. To establish reasonable accommodations, students may be asked to register with Student Life Disability Services (see below for campusspecific contact information). After registration, students should make arrangements with their instructors as soon as possible to discuss your accommodations so that accommodations may be implemented in a timely fashion.

If students are ill and need to miss class, including if they are staying home and away from others while experiencing symptoms of viral infection or fever, they should let their instructor know immediately. In cases where illness interacts with an underlying medical condition, please consult with Student Life Disability Services to request reasonable accommodations.

Religious Accommodations:

Ohio State has had a longstanding practice of making reasonable academic accommodations for students' religious beliefs and practices in accordance with applicable law. In 2023, Ohio State updated its practice to align with new state legislation. Under this new provision, students must be in early communication with their instructors regarding any known accommodation requests for religious beliefs and practices, providing notice of specific dates for which they request alternative accommodations within 14 days after the first instructional day of the course. Instructors in turn shall not question the sincerity of a student's religious or spiritual belief system in reviewing such requests and shall keep requests for accommodations confidential.

With sufficient notice, instructors will provide students with reasonable alternative accommodations with regard to examinations and other academic requirements with respect to students' sincerely held religious beliefs and practices by allowing up to three absences each semester for the student to attend or participate in religious activities. Examples of religious accommodations can include, but are not limited to, rescheduling an exam, altering the time of a student's presentation, allowing make-up assignments to substitute for missed class work, or flexibility in due dates or research responsibilities. If concerns arise about a requested accommodation, instructors are to consult their tenure initiating unit head for assistance.

A student's request for time off shall be provided if the student's sincerely held religious belief or practice severely affects the student's ability to take an exam or meet an academic requirement **and** the student has notified their instructor, in writing during the first 14 days after the course begins, of the date of each absence. Although students are required to provide notice within the first 14 days after a course begins, instructors are strongly encouraged to work with the student to provide a reasonable accommodation if a request is made outside the notice period. A student may not be penalized for an absence approved under this policy.

If students have questions or disputes related to academic accommodations, they should contact their course instructor, and then their department or college office. For questions or to report discrimination or harassment based on religion, individuals should contact the <u>Civil Rights</u> <u>Compliance Office</u>.

Policy: Religious Holidays, Holy Days and Observances

Weather or Other Short-Term Closing:

Should in-person classes be canceled, students will be notified as to which alternative methods of teaching will be offered to ensure continuity of instruction for this class. Communication will be via Carmen announcements and course-wide email.

Instructor Feedback and Response Expectations:

- **Email response**: The CLSE's expectation of instructors is that emails will be responded to within one business day. If your email is sent during the evening or over the weekend, you may not receive a response until the next business day.
- Class announcements: I will send important class-wide messages through the Announcements tool in Carmen. Please check <u>your notification preferences</u> (go.osu.edu/canvas-notifications) to ensure you receive these messages.
- **Graded assignments:** Assignments will be graded and returned to you within one week after they were due. All scores are posted on Carmen no later than the day the graded assignment is returned.

Course Technology:

For help with your password, university e-mail, Carmen, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Standard support hours are available at https://ocio.osu.edu/help/hours, and support for urgent issues is available 24x7.

• Self-Service and Chat support: http://ocio.osu.edu/selfservice

• **Phone:** 614-688-HELP (4357)

Email: 8help@osu.edu
TDD: 614-688-8743

Carmen

- Carmen, Ohio State's Learning Management System, will be used to host materials and activities throughout this course. To access Carmen, visit <u>Carmen.osu.edu</u>. Log in to Carmen using your name.# and password. If you have not setup a name.# and password, visit <u>my.osu.edu</u>.
- Help guides on the use of Carmen can be found at https://resourcecenter.odee.osu.edu/carmen
- This online course requires use of Carmen (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations with your instructor.
- Carmen accessibility

CarmenZoom

- Office hours will be held through Ohio State's conferencing platform, CarmenZoom. A separate guide to accessing CarmenZoom and our office hours is posted on the course Carmen page under Files.
- Students may use the audio and video functions if a webcam and microphone are available. If not, there is still a chat function within CarmenZoom for the student to live chat with the professor or TA in the virtual office hours room.
- <u>Carmen Zoom</u> help guide

TurnItIn

Students at The Ohio State University are accountable for the integrity of the work they submit.
 Therefore, you should be familiar with the guidelines provided by the <u>Committee on Academic</u>

Misconduct (COAM) and Section A of OSU's Code of Student Conduct in order to meet the academic expectations concerning appropriate documentation of sources. In addition, OSU has made TurnItIn, a learning tool and plagiarism prevention system, available to instructors. For this class, you will submit your papers to TurnItIn from Carmen. When grading your work, I will interpret the originality report, following Section A of OSU's Code of Student Conduct as appropriate. For more information about TurnItIn, please see the vendor's guide for students. Note that submitted final papers become part of the OSU database.

Please know that I view TurnItIn first and foremost as a teaching tool to make you a better writer.
You will see in your individual originality reports exactly what the instructors see. We WANT you to
look at this report as soon as you submit your assignments. If you see an issue, please correct it
right away, before we start grading the assignment. You can resubmit without penalty as many
times as you want prior to the established due date for any assignment. After the due date, the
late policy is in effect.

TopHat

- TopHat is a web-based response system that allows students to use their own devices provide responses in the classroom. This course uses Top Hat to promote active engagement, allow for synchronous feedback, and monitor attendance.
- TopHat help guide

Discussion and Communication Guidelines:

The following are expectations for how we should communicate as a class. Above all, please remember to be respectful and thoughtful.

- Tone and civility: Let's maintain a supportive learning community where everyone feels safe and
 where people can disagree amicably. Remember that sarcasm doesn't always come across online
 and is not always appreciated in-person. The instructional team work very hard to provide a
 positive learning experience. Please keep this in mind and remain civilized and respectful in your
 class communications.
- Citing your sources: In academic discussions, please cite your sources to back up what you say.

Intellectual Diversity:

Ohio State is committed to fostering a culture of open inquiry and intellectual diversity within the classroom. This course will cover a range of information and may include discussions or debates about controversial issues, beliefs, or policies. Any such discussions and debates are intended to support understanding of the approved curriculum and relevant course objectives rather than promote any specific point of view. Students will be assessed on principles applicable to the field of study and the content covered in the course. Preparing students for citizenship includes helping them develop critical thinking skills that will allow them to reach their own conclusions regarding complex or controversial matters.

Issue Resolution:

The CLSE believes that student concerns are usually most effectively addressed by the staff closest to the situation. Therefore, students are ordinarily expected to address issues or concerns first with their instructors. If the issue cannot be resolved by your instructor, or for some reason you feel that you absolutely cannot address your concern with your instructor, please feel free to contact the Course Coordinator or Assistant Director Adam Andrews (andrews.171@osu.edu).

Building Emergency Action Plan:

Each building on campus has a Building Emergency Action Plan (BEAP) outlining that specific building's specific procedures to be followed in the event of a range of emergency situations, including fire, weather, terrorism, chemical spills, etc. It is the role of every Buckeye to help keep each other safe and to be aware of these procedures. You can find all of the campus BEAPs at https://dps.osu.edu/beap.

Lyft Ride Smart:

Lyft Ride Smart at Ohio State offers eligible students discounted rides, inside the university-designated <u>service area</u>, from 7 p.m. to 7 a.m. Prices may be impacted by distance, traffic, time of day, special events and prime time surcharges. To qualify for program discounts, users must select "shared ride" when booking in the Lyft app. For more information, visit: https://ttm.osu.edu/ride-smart.

Mental Health:

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available 24/7 by dialing 988 to reach the Suicide and Crisis Lifeline.

Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct:

The Ohio State University is committed to building and maintaining a welcoming community. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Civil Rights Compliance Office (CRCO):

Online reporting form: http://civilrights.osu.edu/

Call 614-247-5838 or TTY 614-688-8605

civilrights@osu.edu

The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Civil Rights Compliance Office to ensure the university can take appropriate action:

- All university employees, except those exempted by legal privilege of confidentiality or expressly
 identified as a confidential reporter, have an obligation to report incidents of sexual assault
 immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information: 1. Any human resource professional (HRP); 2. Anyone who supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty member.

Academic Misconduct:

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's Code of Student Conduct, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct and this syllabus may constitute Academic Misconduct.

The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: Any activity that tends to compromise the academic integrity of the University or subvert the educational process. Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's Code of Student Conduct is never considered an excuse for academic misconduct, so please review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If an instructor suspects that a student has committed academic misconduct in this course, the instructor is obligated by University Rules to report those suspicions to the Committee on Academic Misconduct. If COAM determines that a student violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in the course and suspension or dismissal from the University.

If students have questions about the above policy or what constitutes academic misconduct in this course, they should contact the instructor.

- Unless otherwise specified for a particular assignment, all submitted work should be a student's own unique effort. Collaborative efforts are not permitted unless expressly sanctioned for a particular assignment.
- Unless otherwise specified for a particular assignment, use of Al-generated materials for course submissions is not permitted.
- Reusing past work: In general, you are prohibited in university courses from turning in work from a
 past class to your current class, even if you modify it. If you want to build on past research or
 revisit a topic you've explored in previous courses, please discuss the situation with me.
- Using others' verbatim words without the use of quotation marks <u>and</u> citation is plagiarism. Paraphrased work requires citation to denote the use of others' ideas. Copying other's words without quotation while using citations is still considered plagiarism.

• Use of any technology during a quiz or exam (including but not limited to cell phones, smart watches, headphones, electronic dictionaries, etc.) is strictly prohibited.

Artificial Intelligence and Academic Integrity:

There has been a significant increase in the popularity and availability of a variety of generative artificial intelligence (AI) tools, including ChatGPT, Sudowrite, and others. These tools will help shape the future of work, research and technology, but when used in the wrong way, they can stand in conflict with academic integrity at Ohio State.

All students have important obligations under the Code of Student Conduct to complete all academic and scholarly activities with fairness and honesty. Our professional students also have the responsibility to uphold the professional and ethical standards found in their respective academic honor codes. Specifically, students are not to use unauthorized assistance in the laboratory, on field work, in scholarship, or on a course assignment unless such assistance has been authorized specifically by the course instructor. In addition, students are not to submit their work without acknowledging any word-for-word use and/or paraphrasing of writing, ideas or other work that is not your own. These requirements apply to all students undergraduate, graduate, and professional.

To maintain a culture of integrity and respect, these generative AI tools should not be used in the completion of course assignments unless an instructor for a given course specifically authorizes their use. Some instructors may approve of using generative AI tools in the academic setting for specific goals. However, these tools should be used only with the explicit and clear permission of each individual instructor, and then only in the ways allowed by the instructor.

Copyrighted Class Materials:

© The Instructor's lectures and all course materials, including power point presentations, tests, outlines, assignments, and similar materials, are protected by copyright. You may take notes and make copies of course materials for your own use. You may not and may not allow others to reproduce or distribute lecture notes and course materials publicly whether or not a fee is charged without the express written consent of the course instructor or course coordinator.

Course Schedule: Spring 2026 Schedule and assignments subject to change with as much advance notice as possible

Wee k	Lecture Topic	Readings	Assignments
1	What is sex? Definitions of sex and gender. The scope of sex. Examples throughout organisms	Opinion: Biological Science Rejects the Sex Binary, and That's Good for Humanity by Agustín Fuentes, The Scientist, 27Aug 2024	Group assignment on definitions of sex
2	Sex in humans. Sex chromosomes and fetal sexual differentiation in humans. The SRY gene and hormonal cascades.	Choosing sex by Blanche Capel, The Scientist, 1 Oct 2009	Meiosis group assignment
3	Variation in human sex. SRY crossing over and androgen insensitivity.	Sex Redefined: The idea of 2 sexes is overly simplistic, Scientific American (reprinted from Nature magazine 2015) by C. Ainsworth, 2018.	HHMI module group assignment

		Short video -	
		https://www.biointeractive.org/es/classroom-	
		resources/meiosis	
	Asexual reproduction Advantages and disadvantages of	The sex paradox by Megan Scudellari, The Scientist, 1 Jul 2014 Why sex evolved by Jeff Akst, The Scientist, 13 Oct 2010	Paradox of sex game group
4	asexual reproduction. The paradox of sex and why sex is evolutionarily advantageous.	Sexual Reproduction and the Evolution of Sex by S. Otto, Nature Education 1(1):182, 2008	assignment
5	Sexes across animals. Temperature- dependent sex determination, variation in sex chromosomes, and sex changing fish.	Genetic mechanisms of sex determination, by L. Hake & C. O'Connor, C., Nature Education 1(1):25 2008 https://www.nature.com/scitable/topicpage/genetic-mechanisms-of-sex-determination-314/ Sex Determination: It's in the Genes—Sometimes by Hannah Thomasy, The Scientist, 12 Mar 2025	Infographic gallery walk about variation in animal sex assignment Midterm exam 1
6	Reproduction in plants. Asexual reproduction in plants, selfing, and sex.	Flower Power: A Close Look at Plant Reproduction by Dahlhausen et al. Frontiers for Young Minds, 2020. Angiosperms Chapter 26.3, Biology 2e, OpenStax	Plant sex group assignment
7	Sexes and plants. Why are plants monecious, dioecious, etc.?	Best to be bisexual by Barrett, S., Current Biology 31(6): 22 March 2021, Pages R298-R300 Botanical Battle of the Sexes. By K. Wong, Scientific American. 29 Sep 2000	Presentation on variation in breeding systems
8	Fungal sex. Fungal mating types, temporary reproductive structures, and life cycle.	Characteristics of Fungi, Chapter 24.1, Biology 2e OpenStax Ecology: Fungal Mimics Dupe Animals by Transforming Plants. By Slot, J. and Kassen, MT. Current Biology 31 (5): R250- 2021 Fungal Pseudo-flowers. Blog post: https://plantpathogens.net/chapters/2- hijacking_pollinators	Fungal sex group assignment
9	Sex with help Pollinators, bee mimic orchids, fig wasps, and fungal pollinators.	Figs & Wasps: How are Figs Pollinated? By Melvin, M. Foodunfolded. 2024. https://www.foodunfolded.com/article/figs-wasps-how-plant-and-pollinator-work-together Pollination by sexual deception. by R. Peakall, Current Biology 33(11): R489-R496.	Pollinator group assignment
10	Giving up sex. Colonial living with and without haplodiploidy	The fascinating lives of colonial animals. By L. Beckman, 2021. https://natureaccordingtosam.wordpress.com/2021/11/ 09/the-fascinating-lives-of-colonial-animals/ Lessons from the pond: Clues from green algae on the	Eusociality group assignment
		origin of males and females by Attwooll, C., The Salk	

		Institute. 2010 https://www.salk.edu/news-release/lessons-from-the-pond-clues-from-green-algae-on-the-origin-of-males-and-females/	
		An Introduction to Eusociality. By N. Plowes, Nature Education Knowledge 3(10):7 2010	Midterm exam 2
11	How to succeed in mating. Sexual selection in animals.	Sexual Selection by P. Brennan, Nature Education Knowledge 3(10):79. 2010 The Hidden Side of Sex by P. Brennan, The Scientist, 1 July 2014 The Weapons of Sexual Rivalry by Kendall Powell, Scientific American, 24 Dec 2019.	Infographic gallery walk about variation in sexual selection
12	Sexual strategies. Sex ratios, investment in males vs. female plant structures, and investment in offspring of different sexes.	Sexual selection in plants, by J. Moore and J. Pannell. Current Biology 21(5). 2011	Investment in offspring game
13	Parasites and sex. Brood parasites, parasitoids, complex life cycles of parasites, and ecological and evolutionary strategies.	The Ecology of Avian Brood Parasitism. R. Croston & M. E. Hauber M. E. Nature Education Knowledge 3(10):56. 2010 Animal Mind Control by Jef Akst, The Scientist, 1 Jan 2012 Zombie Fungi Hijack Hosts' Brains by Hannah Thomasy, The Scientist, 29 Oct 2024	Parasites and sex group assignment
14	Birth strategies. Viviparity, ovoviviparity, oviparity. Placentals, marsupials and monotremes.	The Prescient Placenta by Christopher Coe, The Scientist, 1 Aug 2015 5 Things We Bet You Didn't Know About The Placenta by Adrian Erlebacher and Susan J. Fisher, Scientific American, 1 Oct 2017	Variation in birth strategy group assignment
Final s	Final Exam in class		

Subject: BIOL 1870 concurrence

Date: Thursday, September 18, 2025 at 8:54:54 AM Eastern Daylight Time

From: Freudenstein, John
To: Andrews, Adam

Hi Adam:

We discussed the proposed BIOL 1870 yesterday in our EEOB Curriculum Committee and I am happy to report that we can give concurrence.

Best wishes,

John

Subject: Re: Concurrence Request

Date: Wednesday, September 17, 2025 at 11:32:13 AM Eastern Daylight Time

From: Dobritsa, Anna
To: Andrews, Adam
CC: Cole, Susan
Attachments: image001.png

Hi Adam,

MolGen gives its concurrence to this course.

Thanks, Anna

Anna Dobritsa
Associate Professor, Department of Molecular Genetics and Center for Applied Plant Sciences
The Ohio State University
Aronoff Laboratory, Rm. 570
318 W. 12th Ave, Columbus, OH 43210
(614) 688-2197

From: Andrews, Adam <andrews.171@osu.edu>
Sent: Tuesday, September 9, 2025 10:00 AM
To: Dobritsa, Anna dobritsa.1@osu.edu
Cc: Cole, Susan <cole.354@osu.edu>

Subject: Concurrence Request

Anna,

The CLSE is requesting concurrence on a new course, Biology 1870 - *The Biology of Sex*. The syllabus is attached, and I would be happy to address any questions or concerns you might have.

Thank you, Adam



Adam L. Andrews

Assistant Director for Curriculum & Instruction

College of Arts and Sciences | Center for Life Sciences Education

240D Jennings Hall, 1735 Neil Avenue, Columbus, OH 43210